eHealth – interactive, intelligent, innovative

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Introduction

- 2016: Host Lecturer *George Washington University*, D.C.

- Since 2015 in **Board for Medical Informatics** within German **Informatics Society**

- Since 2014 **Professor for eHealth** & Hospital Management, Institute for eHealth and Management in Health Care (**IEMG**), Flensburg University of Applied Sciences (Germany); since 2015 part of the excellence initiative **Baltic Sea Campus on eHealth**
My Vision for eHealth

➤ eHealth to be spelled with an 'i' more often!

;-)
Rewind: wasn‘t eHealth about ′e′?

- eHealth

  = electronic healthcare

  or

  = use of information & communication technologies (ICT) for health

  (WHO 2017)

Rewind: wasn’t eHealth about ‘e’?

10+ E’s (G. Eysenbach, 2001: https://www.ncbi.nlm.nih.gov/pmc/articles/PMC1761894/)

Do you know or can you guess them?

1. Efficiency
2. **Enhancing** quality of care
3. **Evidence** based
4. **Empowerment** of consumers and patients
5. **Encouragement** of new relationship between patient & health pro’s
6. **Education**
7. **Enabling** information exchange and communication in a standardized way
8. **Extending** the scope
9. **Ethics**
10. **Equity**
Why eHealth with an ‘i’?

Lessons from success stories: an ‘i’ like in

- iPhe...
- interactive,
- intelligent,
- innovative!
Making eHealth more **interactive** – in different ways

(1) e.g. *BaltCityPrevention* project

- get together public health **authorities**
  (w/ **providers**, **users**) for tailored services

(2) enabling **peer support** in health apps effective: [http://bit.ly/2ok8llH](http://bit.ly/2ok8llH)

(3) e.g. [https://lifetime.eu/](https://lifetime.eu/) *Connected Health ©*

- exchange of health data
  patient‘s smartphone <-> **provider** infrastructure
  (w/o internet connection)
Making eHealth more *intelligent* (1/2) in terms of *smart*, i.e. situation-specific

1. **automated workflow support**
   - e.g. [www.kumihealth.de](http://www.kumihealth.de) © maps **patient-specific data** (e.g. on conditions) to **corresponding therapies**
   - offers To-Do-lists, suitable communication pathways to clinical staff

2. **like first- aider apps**
   - based on **localization** of registered users’ smartphones

3. **or powered by data from on-board hardware**
   - in individual’s watch, phone or other devices
   - like cardiovascular or cancer detection via taking ‘selfies’ from one’s eye
Making eHealth more **intelligent** (2/2) by proven algorithms

- like fertility app [www.naturalcycles.com](http://www.naturalcycles.com) …
  - officially registered as a *medical device (class II-b)* (evidence-based, of course)

- … or [www.tinnitracks.com](http://www.tinnitracks.com)
  - helps to filter frequencies from patient’s favourite music to calm concerned neurons
  - softens Tinnitus intensity, so fewer persons suffer

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Making eHealth more **innovative**: (1/2) incubators of large healthcare players a trend

- *helios.hub*: accelerator by German hospital chain
- *Startupbootcamp Digital Health (e.g. in Berlin)*: **Philips** one partner
- *Accelerator of Merck & Co.*
- *Healthy Hub* by 5 German public health insurers

- novel approach (to industry) to nurture eHealth (also more interactive)
Making eHealth more **innovative** (2/2) by refining business models

- business models need face-lifts
  - today often sponsored, ad-based or selling user data
    - customer **access** via **new channels**, e.g. retailers, or
    - new **reimbursement** ways: directly by insurances, other **authorities**
  - more **eHealth approaches** need to be…
    - Then hopefully we all become more & more healthy (or, in this case, *eHealthi*)!
...for those who want to keep in touch

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www.institut-ehealth.de/en/institut/
Discussion!?!